

PERMIT CHRONOLOGY
for

Kennecott Utah Copper
North Impoundment Area
(Tailings Expansion)

M/035/015
(February 22, 1996)

- May 8, 1991 Speed message from Wayne Hedberg (DOGM) to Morton Salt regarding rules pertaining to annual report, file number M/035/005.
- September 17, 1991 Letter to DOGM from Denise Dragoo, Fabian & Clendenin Attorneys at Law. The letter stated Morton International, Inc. is terminating operations at its Saltair facility. An agreement has been reached between Kennecott Utah Copper (KUC) and Morton, by which KUC will acquire and assume responsibility for the Saltair facility. Upon assignment from Morton to KUC, Morton requests a written release from responsibility for the Saltair Facility.
- September 18, 1991 Letter from Denise Dragoo regarding Saltair facility emission allowances (M/035/005).
- September 20, 1991 Letter to DOGM from Denise Dragoo, Fabian & Clendenin, requesting DOGM's signature agreeing with Morton's understanding described in the September 17, 1991, letter and phone conversations on September 18, 1991, regarding KUC's assuming responsibility for the Saltair Facility. Division Director agreed to the understanding on September 20, 1991.
- January 8, 1992 Memo to File - January 7, 1992 Meeting Documentation - Permitting Requirements, Morton Salt - Saltair Mine Property, Kennecott Utah Copper. The Division's permitting requirements for Kennecott Utah Copper (KUC) recently acquiring Morton's Saltair Mine (M/035/005) were discussed. Morton had not acquired an approved permit from the Division prior to this sale; therefore, there is no permit to transfer. The Division will continue to hold Morton Salt responsible for reclamation of the Saltair site until an approved permit is issued to Kennecott.
- January 9, 1992 Letter to KUC, to document the understanding of the agreements and commitments made during the January 7, 1992 meeting. A copy of the memo to the file was attached. The Division anticipates KUC to submit a conceptual plan for the site by March 9, 1992.
- *Note attached to memo: All subsequent file information for this site will be sent to file M/035/015 (North Perimeter). Signed by Holland Shepherd.
- January 13, 1992 Letter to Morton Salt Company requesting the annual report for 1991.
- March 9, 1992 Received the 1991 annual report for the Saltair Mine for the months January 1991 to September 1991.

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| March 10, 1992 | Letter from KUC regarding Conceptual Operational and Reclamation Plan for the Morton Property. KUC will submit the appropriate Notice of Intention to Commence Large Mining Operations (NOI) for the Morton property in mid 1992 or sooner. |
| March 30, 1992 | Facsimile of letter from KUC regarding proposed agenda for April 1, 1992 meeting, to discuss permit requirements for the Solar Evaporation Salt Impoundments (former Morton Salt property). |
| April 1, 1992 | Memo to file regarding the meeting held today with KUC and DOGM. KUC is still determining what the Morton property will be used for. |
| May 12, 1992 | Memo to file - Site Inspection of KUC's Saltair Operations. Purpose of the inspection was to familiarize DOGM and Army Corp of Engineers staff with the site, and to identify possible concerns with respect to permitting and reclamation. |
| December 15, 1992 | Letter from KUC with attached NOI to Commence Mining Operations on KUC's North Perimeter Area. |
| January 4, 1993 | Letter to KUC requesting 1992 annual report for the Saltair operation (M/035/005). |
| January 29, 1993 | Received annual report for the North Perimeter Area (M/035/005) for the months October 1991 to October 1992. Minerals mined are "Salt." |
| May 24, 1993 | Letter to KUC. Due to a backlog of other permit reviews, the Division was not able to complete the review of the North Perimeter NOI within the usual 30-day timeframe. DOGM hopes to complete the review within the next 30-45 days. |
| November 2, 1993 | Kennecott Utah Copper Tailings Modernization Project, Agency Presentation Outline. Fact Sheet included, Project Description, and Site Tour Request form included. |
| November 22, 1993 | E-Mail message from Wayne Hedberg, Permit Supervisor to DOGM staff regarding a phone call to KUC due to the most recent public notice regarding KUC's Tailings Impoundment Expansion plans. KUC thought they would be formatting the expansion as a revision to the North Perimeter permit application, probably within the next 2-3 months. |
| December 13, 1993 | Letter to KUC requesting 1993 annual reports for the North Perimeter mine site (M/035/015) and Saltair operations (M/035/005). |

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| December 27, 1993 | Request for recommendation form completed and returned to Salt Lake County Information and Planning Services regarding KUC's North Expansion Tailings Impoundment Modernization project. |
| January 7, 1994 | <p>Memo documenting today's meeting with KUC representatives and DOGM to organize and discuss KUC's current and proposed permits. New boundaries and future permitting proposals were discussed. It was agreed to consolidate all mine file information into one permit number for the Saltair Facility - M/035/005 - and the North Perimeter site - M/035/015. The old file number M/035/005 will be removed and all correspondence will be put under the North Perimeter number M/035/015.</p> <p>DOGM plans a site inspection of the new tailings expansion site on January 13, 1994. KUC requested an extension for the 1993 annual reports. March 31, 1994, was established as a deadline for the reports.</p> |
| January 24, 1994 | Letter from KUC confirming their request for an extension for submittal of the 1993 annual reports to March 31, 1994. |
| January 27, 1994 | Memo regarding site inspection made on January 13, 1994. Purpose of the inspection was to get a general overview of the tailings expansion proposal and tour the tailings facility to view the proposed expansion areas. |
| February 3, 1994 | Letter to KUC granting the extension request for submitting the 1993 annual reports. |
| February 16, 1994 | Draft of initial review letter sent to KUC regarding the North Perimeter NOI. |
| February 17, 1994 | Meeting held between DOGM, KUC and Morrison Knudsen to discuss tailings modernization project. |
| February 24, 1994 | Letter from KUC regarding additional soil sampling for the proposed North Impoundment footprint. Soil samples to be sent to the Utah State University Analytical Laboratory for analysis. |
| February 28, 1994 | Received copy of letter to KUC from Division of Water Quality requesting additional information for the Ground Water Discharge Permit Application for Kennecott Tailings Impoundment, Ground Water Discharge Permit No. UGW350011. |
| March 16, 1994 | Newspaper clippings from the Salt Lake Tribune. "Magna Meeting Will Discuss Proposed 'Superfund Sites'." and "Kennecott Will Shift Tailings Expansion Beyond S.L. Boundary." |

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| March 30, 1994 | Letter to KUC acknowledging DOGM's receipt of the Large Mine Permit application for the North Perimeter Area (old Morton Salt Property). Because KUC's proposal to modify their original intentions for this area, the initial review comments are no longer valid or pertinent. DOGM will temporarily suspended the review until the revised permit application is received. |
| March 30, 1994 | Received KUC's 1993 Annual Report. |
| April 5, 1994 | Letter from KUC describing the design approach and criteria for relocating the C-7 Ditch as part of the Tailings Modernization Project. |
| May 9, 1994 | Invitation from KUC to attend the Preapplication Meeting scheduled for Thursday, May 12, 1994 concerning KUC's proposed expansion of the tailings impoundment subject to the Army Corp of Engineers jurisdiction. The proposed agenda and information summary are included. |
| May 12, 1994 | Corp of Engineers Pre-Application Meeting list of attendees. |
| May 20, 1994 | Memo to file regarding the Army Corps of Engineers Pre-application Meeting, Proposed Tailings Modernization Project, KUC. The preferred alternative for the expansion is described. |
| June 18, 1994 | Newspaper clipping from the Salt Lake Tribune; "Saltair Sues Kennecott, Claims Copper Giant Fouling Beaches." |
| June 30, 1994 | Copy of letter to KUC from Division of Water Quality, regarding request for information to support draft permit, Kennecott Tailings Impoundment, Proposed Ground Water Discharge Permit No. UGW350011. |
| August 4, 1994 | Copy of letter to KUC from United States Environmental Protection Agency, regarding approval for land application of biosolids, Magna Tailings Pond Reclamation Demonstration Project. |
| September 15, 1994 | Newspaper clipping from METRO; "Kennecott plan waits for report." |
| September 16, 1994 | Newspaper clipping from Salt Lake Tribune; "Tailings-Pond Plan Under Scrutiny of Corps of Engineers." |
| September 16, 1994 | DOGM received NOI submission from KUC for their Tailings Modernization Project. |
| October 7, 1994 | Public Notice from US Army Corps of Engineers, regarding KUC's expansion of the existing tailings impoundment pond. the Corps has determined that an |

Environmental Impact Statement (EIS) will be necessary before a permit decision is made. Comments on the EIS are being sought. Comments are due to the Corps of Engineers by November 7, 1994.

- October 17, 1994 Letter to KUC stating that due to a backlog of other permit reviews, and a recent technical staff position vacancy, DOGM unable to complete a review of the Tailings Modernization Project plan within the usual timeframe. Hope to be able to complete the review within the next 30-45 days.
- December 15, 1994 Letter to KUC requesting annual reports for 1994.
- December 20, 1994 Letter from the Division of Water Quality requesting technical assistance from DOGM staff with expertise in acid base accounting and prediction of future tailings chemistry.
- January 25, 1995 Received Preliminary Draft Environmental Impact Statement for the proposed Kennecott Tailings Modernization Project from US Army Corps of Engineers. Comments are due by February 25, 1995.
- January 31, 1995 Annual reports received for 1994.
- February 2, 1995 Letter to KUC clarifying file numbers for KUC's projects. M/035/002 is the Bingham Pit & UCD Modernization; M/035/011 is the 4th Line/Copperton Concentrator; M/045/004 is Pine Canyon; and M/035/015 is the North Impoundment/North Perimeter Area. A copy of the Division memo of January 7, 1994 is enclosed.
- February 3, 1995 Copy of KUC's letter to Division of Water Quality regarding the first annual report of the demonstration project for the Application of Municipal Biosolids to the Kennecott Tailings Impoundment.
- February 8, 1995 Received copy of "Authorization to Discharge Under the Utah Pollutant Discharge Elimination System" from the Division of Water Quality for sites near Magna.
- March 6, 1995 DOGM letter to KUC. Review of the September 16, 1994 NOI submission for KUC's Tailings Modernization Project/North Impoundment. A number of comments need to be addressed. A sample reclamation estimate and tailings analyses guideline were attached.
- March 27, 1995 Newspaper clippings, Salt Lake Tribune; "Kennecott to Wipe Out, Replace Wetlands", and "Kennecott Future Tied to Tailings."

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| April 25, 1995 | Memo to file. Site Inspection of the Tailings Impoundment made on April 18, 1995. Purpose of inspection was to examine the acid generation test embankment, diving board area and sludge test plots with Division of Water Quality staff. |
| May 4, 1995 | DOGM received KUC's submission "Tailings Modernization Project, DOGM Supplement" (No. 1). |
| May 15, 1995 | Received copy of KUC's letter to Environmental Protection Agency, Biosolids Program Manager. Letter addressed application to apply biosolids for mine reclamation at greater than agronomic rates. Maps of the proposed site were attached. |
| May 17, 1995 | DOGM received "Summary Report, Gypstack Characterization", prepared by Shepherd Miller, Inc. |
| May 23, 1995 | US Army Corps of Engineers - Public Notice. Kennecott's Tailings Modernization Project Draft Environmental Impact Statement - Public Meeting to be held May 31, 1995. |
| May 23, 1995 | Received copy of KUC's cover letter to Division of Water Quality accompanying the report "Acidification Potential for Acidification of the Tailings Impoundment", prepared by Shepherd Miller and Schafer and Associates. |
| May 30, 1995 | Received copy of KUC's letter to Division of Water Quality regarding Notification of an Unpermitted Discharge from Outfall 004, UPDES Permit. |
| July 28, 1995 | Newspaper clipping from Salt Lake Tribune; "Great Salt Lake's Wildlife Faces Toxic Threat From Canal's Selenium." |
| July 29, 1995 | Newspaper clipping from Salt Lake Tribune; Correction to July 28, 1995, figures for the selenium levels in Kennecott's C-7 Ditch. |
| August 9, 1995 | Received copy of letter from Division of Water Quality to KUC regarding the Draft ground Water Discharge Permit and Statement of Basis for Permit Renewal; Small Reservoir; Ground Water Discharge Permit No. UGW350004. |
| August 10, 1995 | E-Mail message from DOGM to Water Quality providing a brief overview of a meeting held today between DOGM, Kennecott and DWQ representatives. Meeting was to address concerns involving the acid-generation study report and potential long-term impacts to local groundwater resources and revegetation |

efforts on the tailings. All parties agreed to requesting Kennecott to assist in the funding of an independent technical review committee, board, or task force.

- August 22, 1995 Received copy of letter from Division of Water Quality to KUC, "Response to Kennecott Comments on Draft Ground Water Discharge Permit and Statement of Basis for Kennecott Tailings Impoundment, Proposed Ground Water Discharge Permit No. UGW350011." A copy of the draft statement of basis with redlined text is included.
- August 28, 1995 Received copy of KUC's letter to Division of Water Quality, regarding Ground Water Discharge Permit No. UGW350011 Financial Commitment for Technical Experts. Kennecott is in agreement to provide funding (\$50,000 initial budget which can be increased if necessary) for technical experts to assist DWQ and DOGM in reviewing the acid-generation concerns.
- September 19, 1995 DOGM's second review letter faxed and original mailed to KUC regarding the Tailings Modernization Project/North Impoundment NOI. The documents reviewed included: 1) "Summary Report - Gypstack Characterization" by Shepherd Miller, Inc. received 5/18/95; 2) "Acidification Potential of the Kennecott Tailings, Final Report", by Shepherd Miller, Inc. received 5/23/95; and 3) "Tailings Modernization Project, DOGM Supplement", received 5/4/95.
- September 22, 1995 Letter from KUC regarding an extension of the previously approved biosolids demonstration project, under the direction of the University of Utah. The U of U proposal is attached.
- September 27, 1995 Received copy of letter from US Environmental Protection Agency to KUC regarding , Approval for Modification of Land Application of Biosolids Magna Tailings Pond Reclamation Demonstration Project.
- October 2, 1995 KUC acidification training session at DOGM offices. Attended by KUC staff and consultants, DOGM and DWQ staff.
- October 10, 1995 Facsimile letter to DOGM from University of Utah, attaching two maps DOGM requested: (1) an overall plan view of the biosolids locations and 2) the map of site #5 for KUC's Biosolids Project.
- October 10, 1995 DOGM letter to KUC granting approval of biosolids application amendment, North Perimeter Tailings Project.
- October 11, 1995 Memo to Board of Oil, Gas and Mining. Kennecott wishes to address the Board of Oil, Gas and Mining during the executive session of its October 25, 1995

hearing, regarding a conceptual self-bonding proposal for the North Impoundment Expansion Project.

- October 16, 1995 Received KUC submission "DOGM Supplement No. 2."
- October 23, 1995 Received copy of Division of Water Quality's Public Notice of Issuance of Ground Water Discharge Permit No. UGW350011. Public comments must be received prior to November 19, 1995.
- October 24, 1995 Received copy of Division of Water Quality's letter to KUC regarding Draft Ground Water Discharge Permit and Statement of Basis for Kennecott Tailings Impoundment, Ground Water Discharge Permit No UGW350011. Minor modifications were made to the permit based on KUC's suggestions in their August 28, 1995 letter.
- October 25, 1995 KUC presents proposal for self bonding to Board of Oil, Gas and Mining during informal briefing session. The main issue is confidentiality of financial information required. The Utah Mining Association President also makes a presentation on behalf of KUC.
- November 24, 1995 Received copy of Division of Water Quality's letter to KUC regarding well abandonment. KUC is to provide DWQ with well abandonment schedule.
- November 24, 1995 Received copy of Division of Water Quality's letter to KUC, granting approval of additional and replacement wells for the Tailings Impoundment. The locations and specifications for the new wells are in accord with their requirements.
- December 4, 1995 Received copy of letter from Assistant Attorney General to KUC stating that the Board of Oil, Gas and Mining will only rule on the merits of Kennecott's request for self-bonding on the "North Impoundment Expansion Project", if and when that matter is brought back to the Board for a formal adjudication.
- December 13, 1995 Request for 1995 annual report.
- December 18, 1995 DOGM comments on the KUC Tailings Surety Estimate as discussed in a phone conversation with KUC on December 15, 1995.
- December 19, 1995 DOGM letter to KUC Treasury Department granting approval to replace the current First Security Bank Letter of Credit (LOC) for the 4th Line/Copperton Concentrator with a LOC from J.P. Morgan. DOGM believes a LOC from J.P. Morgan would be accepted by the Board as surety for the tailings expansion.

- December 20, 1995 DOGM received informal KUC response to 12/15/95 comments on the surety estimate calculations for the tailings expansion. A copy of the DOGM phone comments of 12/15/95 was given to KUC.
- December 20, 1995 Meeting held at DOGM offices.
- December 22, 1995 Faxed copy of DOGM's draft tentative approval and Review of Supplement No. 2 to KUC. KUC is asked to review conditions and advise if acceptable. Public notice is ready to send to Newspaper Agency for publication.
- December 22, 1995 Notice sent to the Grants Coordinator, State Clearinghouse regarding KUC's North Perimeter Expansion.
- December 22, 1995 Sent Notice of Tentative Approval to Newspaper Agency (Salt Lake Tribune) for publication no later than the 27th day of December, 1995.
- December 22, 1995 DOGM letter to KUC regarding Review of Supplement No. 2, and Notice of Tentative Approval, Tailings Modernization Project - North Impoundment Expansion. DOGM prepared to grant conditional tentative approval of KUC's permit application for the Tailings Modernization Project.
- December 22, 1995 Received copy of US Army Corps of Engineers Public Notice regarding KUC's Tailings Modernization Project Final Environmental Impact Statement (EIS) - Notice of Availability and Public Meeting. A public meeting will be held January 18, 1996 to address any concerns with the final EIS.
- December 25, 1995 Newspaper clipping from Salt Lake Tribune; "Metal No Problem for Bird Preserve, But Kennecott Study Says Problems Could Arise in Drain Ditch."
- December 26, 1995 Certified letter sent to KUC: "Public Notice to Owners of Record, Notice of Tentative Approval, KUC's Tailings Modernization Project - North Impoundment Expansion.
- December 27, 1995 Received copy of Division of Water Quality letter to KUC granting final approval of the Kennecott Tailings Impoundment Ground Water Discharge Permit #UGW350011. Copy of the permit is also attached.
- December 28, 1995 Memo to file documenting 12/20/95 meeting held at DOGM offices to discuss KUC's report "Acidification Potential of the Kennecott Tailings" in relation to the tailings modernization permit applications currently being processed by DWQ and the Division. KUC agreed to provide DOGM and DWQ with 4 types of information. Another meeting is proposed for January 30, 1996, to discuss a proposed tailings monitoring plan.

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| December 29, 1995 | Received copy of Division of Water Quality letter to KUC regarding, "Signed Copy of Memorandum of Agreement" in support of consulting services for the KUC Tailings Modernization permitting. The first invoice for consulting services is enclosed. |
| January 2, 1996 | Faxed Reclamation Contract form and guidelines to KUC. |
| January 4, 1996 | Received Proof of Publication from Newspaper Agency Corporation. DOGM grants tentative approval for KUC's Tailings Modernization Project North Perimeter Expansion. Notice was printed December 28, 1995. |
| January 5, 1996 | Faxed to KUC DOGM's Review of Supplement #2, Notice of Tentative Approval, KUC Tailings Modernization Project. Hard copy being mailed. |
| January 8, 1996 | DOGM received KUC's submission "Tailings Modernization Project DOGM Supplement No. 3." This submission provides information discussed during the 12/20/95 meeting, and also addresses the DOGM tentative approval letter of 12/22/95. |
| January 9, 1996 | Memo to Board, requesting approval of form and amount of surety for KUC's Tailings Modernization Project - North Expansion. Project to provide @3500 acres of storage capacity for processed tailings; \$17,485,000 surety in the form of a LOC from Morgan Guaranty Trust Company (c/o JP Morgan Services, Inc.). |
| January 10, 1996 | Faxed draft copy of Reclamation Contract for KUC's Tailings Modernization Project to Kennecott Corporation's Treasury Department and to Paula Doughty (KUC). KUC asked to advise ASAP if this contract is incorrect. |
| January 10, 1996 | Received copy of DWQ's letter to KUC regarding the UPDES permit No. UTG070066 for their facility. Copy of the permit is attached. |
| January 17, 1996 | Received facsimile from KUC list of names of adjacent land owners of record. This list was requested by DOGM in order to send a copy of the Notice of Tentative Approval to adjacent land owners of KUC's Tailings Modernization Expansion Project. |
| January 18, 1996 | Sent Notice of Tentative Approval for Kennecott Utah Copper's Tailings Modernization Project - North Perimeter Expansion to owners of record (adjacent land owners). |

- January 22, 1996 Received signed Reclamation Contract from Kennecott Utah Copper Corporation with attached Letter of Credit for \$17,485,000 for the Tailings Modernization Project - North Perimeter Expansion to encompass 3334 acres.
- January 24, 1996 DOGM presented the Board with KUC's amount and form of surety. The Board granted approval conditioned upon the successful completion of the 30-day public comment period which will terminate at 5:00 p.m. January 29, 1996.
- February 2, 1996 Received copy of 1/23/96 letter from DWQ to US Army Corps of Engineers regarding comments on the EIS for Kennecott Tailings Modernization Public Notice 199450301.
- February 2, 1996 Letter sent to KUC granting final approval of their Tailings Modernization Project - North Impoundment Expansion conditioned upon KUC's acceptance of the following: 1) KUC will consolidate the permitting documents (original application and the three subsequent supplements) into one complete and concise permit application and provide DOGM with two copies, no later than March 18, 1996. Copies of the fully signed and executed Reclamation Contract and surety forms were enclosed.